



Five Evaluation Questions – proposal for an interactive tool

Proposal for the development of an interactive tool based on *Assessing the Evaluability of Complex Public Health Interventions: Five Questions for Researchers, Funders and Policymakers*

1. Summary

The Centre for Diet and Activity Research (CEDAR) is leading the development of an interactive tool to aid effective and appropriate evaluation of complex health interventions. The basis of this tool is the paper *Assessing the Evaluability of Complex Public Health Interventions: Five Questions for Researchers, Funders and Policymakers*. (Milbank Quarterly 2011, 89:2, 206–225. DOI 10.1111/j.1468-0009.2011.00626.x).

- The full paper is available at <http://dx.doi.org/10.1111/j.1468-0009.2011.00626.x>
Please contact ocf26@medschl.cam.ac.uk if you have trouble accessing the paper.

This proposal document outlines the context, potential audience and format for such a tool. We intend to develop this tool in collaboration with potential users, and welcome feedback on any points raised to Oliver Francis on ocf26@medschl.cam.ac.uk / 01223 746892. If you would like to be involved more closely in such a process, please also contact Oliver.

How we envisage this tool

There is rarely a one-size-fits-all solution for the evaluation of complex public health intervention. In common with the original paper, we are seeking to make a ‘thinking tool’ that can be used to *stimulate and structure debate and decision-making* around evaluation of complex public health interventions. Whilst this tool will point to a number of resources, *we are not seeking to create a manual or a checklist, or to duplicate existing resources*. It will help with decisions about *whether, when and what* to evaluate, and then link to existing resources that provide guidance on how to evaluate. It will be aimed at researchers, practitioners and policymakers and commissioners of interventions. It will be useable by individuals and by groups, online and offline.

The original *Five Questions* abstract

- **Context:** Evidence to support government programs to improve public health often is weak. Recognition of this “knowledge gap” has led to calls for more and better evaluation, but decisions about priorities for evaluation also need to be addressed in regard to financial restraint.
- **Methods:** Using England's Healthy Community Challenge Fund as a case study, this article presents a set of questions to stimulate and structure debate among researchers, funders, and policymakers and help make decisions about evaluation within and between complex public health interventions as they evolve from initial concept to dissemination of full-scale intervention packages.
- **Findings:** This approach can be used to identify the types of knowledge that might be generated from any evaluation, given the strength of evidence available in response to each of five questions, and to support a more systematic consideration of resource allocation decisions, depending on the types of knowledge required.
- **Conclusions:** The principles of this approach may be generalisable, and should be tested and refined for other complex public health and wider social interventions.

The original Five Questions

1. Where is a particular intervention situated in the evolutionary flowchart of an overall intervention program?
2. How will an evaluative study of this intervention affect policy decisions?
3. What are the plausible sizes and distribution of the intervention's hypothesized impacts?
4. How will the findings of an evaluative study add value to the existing scientific evidence?
5. Is it practicable to evaluate the intervention in the time available?

2. Context and Audience

There are a number of thorough evaluation manuals available – both for academics and practitioners – that this tool could complement and point to:

- Developing and evaluating complex interventions – MRC Guidance www.mrc.ac.uk/complexinterventionsguidance
- MRC Diet and physical activity measurement toolkit <http://dapa-toolkit.mrc.ac.uk/>
- HM Treasury Magenta Book www.hm-treasury.gov.uk/data_magentabook_index.htm
- National Obesity Observatory Standard Evaluation Frameworks www.noo.org.uk/sef
- RAND Performance Audit Handbook www.rand.org/pubs/technical_reports/TR788.html

It is intended that the interactive tool will be aimed at:

- **Researchers** – those charged with conducting research and evaluation of complex public health interventions, both academics and research officers within local authorities or third party evaluators.
- **Practitioners and policymakers** – those involved in implementing and evaluating interventions at a local and national level, and setting the frameworks for this work.
- **Non-academic funders** – commissioners who fund both interventions and their evaluation.

In the context of growing public health challenges with complex causes, there is a need to understand and apply “what works” to public health interventions. However, evidence to support programs to improve public health is often weak, so better evaluation is needed. However, ***decisions about priorities for evaluation need to be made in the context of limited finances.***

The public health outcomes framework for England, 2013-2016 recognises the wide ranging influence on public health, and proposes that the integration of public health into local government will allow the “many factors that influence public health over the course of a lifetime” to be “understood and acted upon”. It details a range of outcomes and indicators against which progress will be assessed. However, it is likely that a number of outcomes will be beyond the timescale of conventional evaluation, and that there may be processes as well as final outcomes that can be measured to demonstrate the ongoing effectiveness of an intervention.

These factors suggest that there is space in the public health landscape for a tool that:

- supports organisations in thinking about how to evaluate the sort of holistic solutions to public health challenges that are envisaged;
- complements existing manuals and the public health outcomes framework by providing a tool to help users identify interim measures against which to evaluate interventions;
- ensures that local organisations use their available resources to choose the correct opportunities for evaluation given that resources are limited and not all interventions are evaluable.

A significant body of academic research also rests on evaluating real world interventions. Whilst experienced researchers may be comfortable with the literature on the topic, PhD students and early

career researchers involved in their first complex evaluation may have need for such a thinking tool. This would complement in particular the *MRC Guidance: Developing and evaluating complex interventions*.

Given the necessity to apply the *Five Questions* principles and approaches at different stages in the lifecycle of an intervention/evaluation, it is likely that different audiences could use this tool at different stages in the lifecycle of intervention and evaluation.

Bridging the gaps

This tool must be useable by practitioners and policymakers without losing sight of the academic grounding in which it is based. *Five Questions* recognises that the goal of researchers and policymakers may not always match up: “Scientifically evaluating a project is completely different from auditing its execution and financial management, which may well be required by the funders of an intervention but contribute little to scientific knowledge.” The original paper further distinguishes between the accumulation of scientific knowledge and “assessing the value of a new study for information a policy decision.” Policy decisions “may be influenced more by certain key findings of research than by the weight and methodological rigour of scientific evidence in a systematic review.”

The interactive version of this tool will need to be part of bridge-building between these perspectives. For example, question four of the original paper – *How will the findings of an evaluative study add value to the existing scientific evidence?* – may appear the least relevant to non-academic audiences. However, this question will still be a significant consideration of any academic partners that might wish to engage in an evaluative project. This question also raises important issues of generalisability of findings – which can be as important to policymakers as to researchers.

3. Example interventions

It is intended that this tool could be used for direct public health initiatives and for other complex intervention that have public health implications, such as changes to public transport infrastructure or housing. This is well illustrated by the original *Five Questions*’ case study of the *Healthy Towns* programme, which was intended to test ‘holistic’ approaches to promoting physical activity and improving diet, with an expectation of investment in infrastructural improvements and community-level effects. The nine *Healthy Towns* interpreted this expectation in various ways, for example:

- **Family Health Hubs (Dudley):** new buildings with exercise equipment and activities for families, located in parks, staffed by activity rangers, and accessed by improved infrastructure for walking and cycling from nearby local neighbourhoods and schools. The hubs provide a range of instructor-led fitness classes, access to low-maintenance outdoor gym equipment, and healthy eating and physical activity events organised by rangers in the local area (such as guided walks, dance classes, health-eating barbecues and cooking demonstrations). The overall aim is to provide a family-friendly community hub for behaviour change linked to obesity prevention in both adults and children. This intervention should provide opportunities to contribute new evidence on, for example, the impact of making recreational facilities available closer to home, the effect of providing new infrastructure for walking and cycling, and the potential to change social norms concerning the use of structured opportunities for physical activity and health eating in children living in deprived neighbourhoods. More about Dudley Healthy Towns at www.dudleyhealthytowns.co.uk
- **Healthy Urban Planning (Thetford):** the redesign of the existing built environment to encourage health-promotion behaviours. Thetford is expected to grow rapidly over the next twenty years, thus increasing the demand for new housing, transport and community infrastructure. This intervention is a long-term strategic activity to ensure that “health” is fully incorporated into the urban design and planning policy related to future growth and regeneration. Mechanisms by

which this may occur include incorporating health in the strategic master plan, ensuring that active travel is reflected in the local transport plan, and embedding public health principles into the assessment of planning applications and the design of new neighbourhoods and communities. As such this intervention is well beyond the horizons of most evaluation teams. More about Thetford Health Towns at www.thetfordhealthytown.co.uk

In the longer term, given that complex interventions and evaluations are not restricted to public health, there is also the potential to apply a version of this framework and tool to other policy areas.

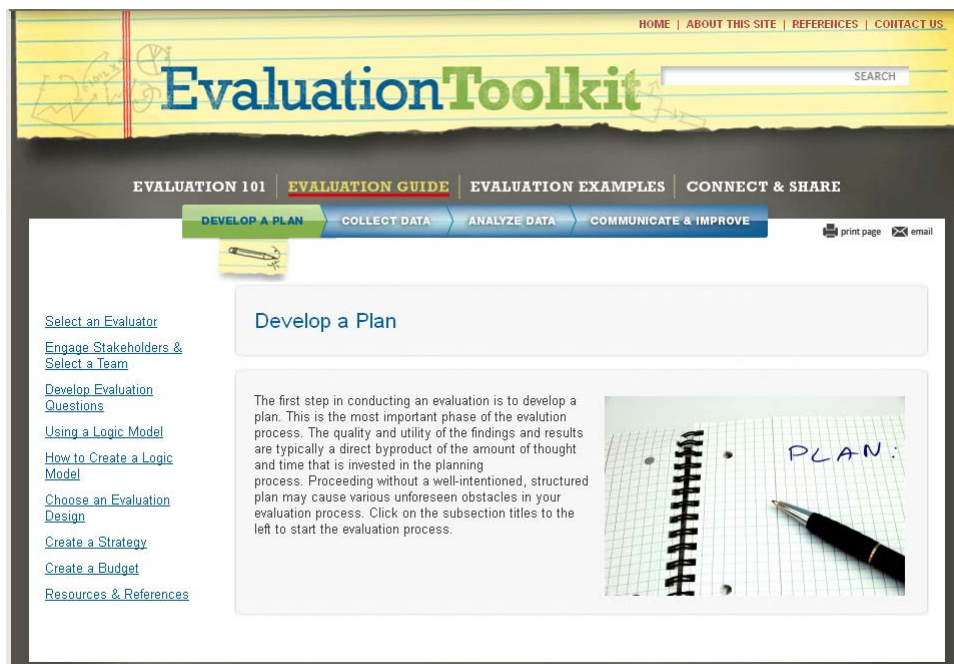
4. Format

As stated, this tool is not intended to be a manual or a checklist. Rather it will aid structured dialogue and decisions making about what interventions should be evaluated, when to evaluate them and how evaluation might be used. Ideally, the tool, or elements of it, will need to work in a number of scenarios:

- As a standalone tool that an individual user can use to structure their thinking when developing research proposals, evaluation logic models etc.
- As a product that an established or ad hoc team can use to structure their working – for example in planning meetings for an intervention/evaluation.
- As a basis for training or workshop aimed at developing evaluation skills.

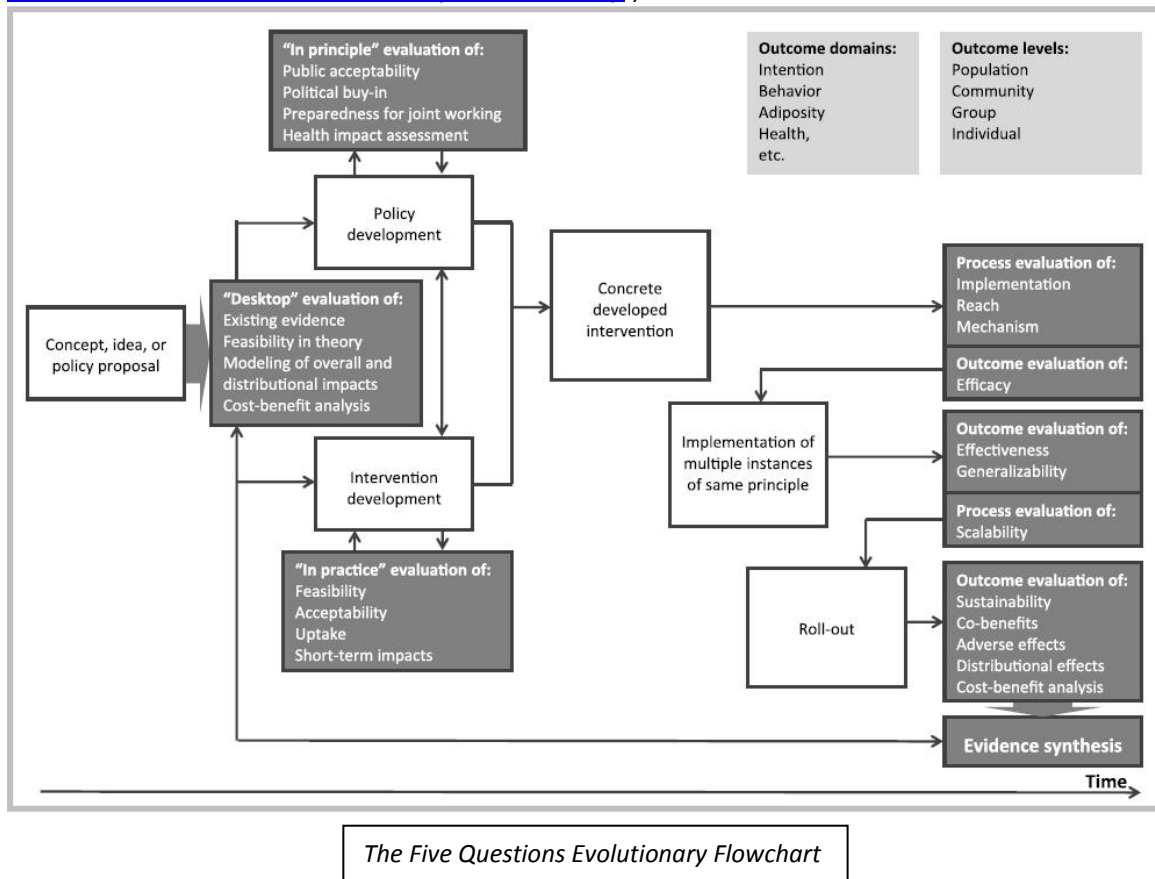
Therefore it is proposed that the tool consists of a number of elements which can be used separately or as part of a set and process. The exact nature of these elements will be decided in collaboration with potential users. Ideally the tool would also provide content adapted to different types of users depending on their selected preferences.

a) Simplified text. A simplified text version of the main points of the *Five Questions* paper, with suitable design to maximise readability. This would be printable (or pre-printed), but with the online version hyperlinked to deeper resources. See, for example: <http://toolkit.pellinstitute.org/> (allowing for the fact that *Five Questions* is not a manual.)



An example of simplified interactive text

b) Interactive flowchart. An online version of the Evolutionary Flowchart from *Five Questions* that enables users to identify suitable processes and outcomes to evaluation at each stage, and drill down for other resources that could support areas of evaluation. Potentially this could also be expressed in the form of an interactive map of a representative town to show where different interventions and evaluations might take place. See for example <http://beta.ctc.org.uk/cycletopia> (although something less cartoon-like and more map-based is envisaged – see for example www.nbtowncentres.co.uk/directory/nuneaton.asp)



This could cross link to other available evaluation tools that do take more of a 'manual' approach. Guardian interactive guides www.guardian.co.uk/interactive give an example of how diagrams and text can be effectively combined with the ability to explore further information as required.

c) Workbook. A printable / editable workbook that allows individuals or groups to address each of the five questions. It would be necessary to break down the five questions into a series of sub-questions or prompts. It is important that this remains true to the goal of the original paper to "stimulate and structure debate" – even if internal debate by the user. It will require the user to apply questions and theories to their own practical examples rather than providing a checklist that they must complete.

d) Slide set. A series of PowerPoint slides utilising text and images from the above. These could be used to run training or workshop linked with *Five Questions*. Suitably annotated slides could also be used by intervention or evaluation leads as part of planning sessions through the progress of an intervention.

5. Next steps

Please send any comments on this proposal to Oliver Francis on ocf26@medschl.cam.ac.uk / 01223 746892. We indeed to develop an early prototype of this tool and test it out with a User Group – both online and through meetings. If you would like to be involved in this User Group in any capacity, please also let Oliver know.

It is anticipated that the eventual product will be used by CEDAR and other organisations such as Fuse, the Centre for Translational Research in Public Health, as part of wider work with policy and practice partners.

Centre for Diet and Activity Research – November 2012